

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (currently amended) ~~A radiating cable~~ An antenna comprising:

at least one cable segment (1),

each said cable segment comprising a pair of insulated conductor wires (2), the

each said cable segment having a free end at which free end the insulated conductor wires have first comprising at least one cable segment (1) in which said conductor wires have ends (5) connected to a connector, and free ends (3) opposite said connector, wherein said free ends are connected together through to a load (4) equal to a differential mode characteristic impedance of said at least one the cable segment,

the insulated conductor wires having second ends (5) connected to a connector (6) opposite the first ends.

2. (previously presented) A radiating cable according to claim 1, comprising at least two cable segments whose second ends (5) are connected to the connector (6) in a parallel configuration.

3. (previously presented) A radiating cable according to claim 2, wherein the two cable segments (1) are identical.

4. (previously presented) A radiating cable according to claim 1, wherein the pair of insulated conductor wires (2) is placed in a supporting sheath (9).

5. (previously presented) A radiating cable according to claim 1, wherein the insulated conductor wires are twisted together, at least in part.

6. (previously presented) A radiating cable according to claim 5, wherein the insulated conductor wires (2) are twisted at a pitch lying in the range about 15 times to about 30 times the diameter of the insulated wires.

7. (previously presented) A radiating cable according to claim 4, wherein the wires are twisted alternately with right-handed twist and with left-handed twist.

8. (previously presented) A radiating cable according to claim 7, wherein a portion of cable with right-handed twist is

separated from a portion of cable with left-handed twist by a portion of cable in which the insulated wires are substantially parallel to each other.

9. (previously presented) A radiating cable according to claim 1, including a dielectric tape (7) in contact with the insulated conductor wires.

10. (previously presented) A radiating cable according to claim 1, including metal tapes wound helically without overlap around the pairs of insulated conductor wires.

11. (previously presented) A radiating cable according to claim 9 wherein,

the pairs of insulated conductor wires (2) are placed in a supporting sheath (9),

metal tapes are wound helically without overlap around the pair of insulated conductor wires, and

the metal tapes (10) extend between the dielectric tape (7) and the supporting sheath (9).

Claims 12-13 (cancelled).

14. (new) An antenna comprising:

two cable segments (1);

each said cable segment comprising a pair of insulated conductor wires (2);

each said cable segment terminating at a first end (3) with a load (4), said cable segment and said load having the same characteristic impedance;

a connector connecting second ends (5) of the two cable segments in parallel; and

a transceiver connector connected to said connector, wherein,

each of the cable segments have a first length and a total extended length of the two cable segments equals approximately twice the first length.

15. (new) The antenna of claim 14, wherein the two cable segments are identical.

16. (new) The antenna of claim 14, wherein,

the insulated conductor wires are twisted copper conductors having a capacitance of 210 picofarads per meter, and

insulation of the wires has a dielectric constant of 1.463.

17. (new) The antenna of claim 14, wherein a length of each cable segment is about 35 meters long for transmitting data at up to about 2.4 gigahertz.

18. (new) The antenna of claim 14, further comprising: a dielectric tape (7) holding together the insulated conductor wires; metal tapes (10) covering the dielectric tape; and a supporting sheath (9) surrounding the metal tapes, wherein,

the metal tapes are wound helically without overlap around the pair of insulated conductor wires, and
the metal tapes extend between the dielectric tape and the supporting sheath.

19. (new) The antenna of claim 14, wherein, the metal tapes have edges spaced apart by gaps about one to two times a width of the metal tapes.

20. (new) The antenna of claim 14, further comprising: a dielectric tape (7) holding together the insulated conductor wires; metal wires (10) wound around each of the insulated conductor wires; and

a supporting sheath (9), wherein,
the metal tapes are wound helically without overlap
around the pair of insulated conductor wires, and
the metal tapes extend between the dielectric tape and
the supporting sheath.

21. (new) The antenna of claim 18, wherein each of the
insulated conductor wires comprise multiple twisted wire strands.

22. (new) An antenna comprising:
two cable segments (1);
each said cable segment comprising a pair of insulated
conductor wires (2);
a termination load (4) terminating a first end (3) of
each cable segment at free ends of the pair of insulated conductor
wires, said cable segment and said termination load having the
same characteristic impedance;
a connector connecting second ends (5) of the two cable
segments in parallel; and
a transceiver connector connected to said connector,
wherein,
each of the cable segments have a first length and a

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total extended length of the two cable segments equals approximately twice the first length,

the free ends of the insulated conductor wires are free of any connection to any equipment.